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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,794	04/25/2005	Masakazu Funahashi	28955.4026	6624

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STEPTOE & JOHNSON LLP  
1330 CONNECTICUT AVENUE, N.W.  
WASHINGTON, DC 20036

EXAMINER
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GARRETT, DAWN L

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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12/05/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/532,794

**Applicant(s)**

FUNAHASHI, MASAKAZU

**Examiner**

Dawn Garrett

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

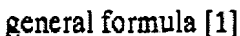
### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### ***Response to Amendment***

### ***Response to Amendment***

- Hosokawa et al. discloses electroluminescent elements comprising material according to formula [1]



Y is according to formula [2] set forth by Hosokawa et al., but since a, b, c, and d may be zero, Y is not required (see abstract). See especially formula [4] of Hosokawa et al. showing the same aromatic ring group (chrysene) between the nitrogens, which is the

same as required by instant claim 1. X groups may include substituted arylenes of 6 to 30 carbon atoms, which would include the at least one "A" substituent as required by claim 1 wherein if any two of instant m1, m2, m3, m4, m5, m6, m7 or m8 is 2 or greater, groups may be linked together to form a saturated or unsaturated ring (see EP claim 2).

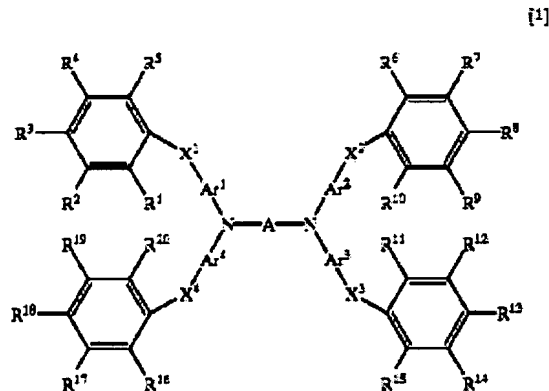
[It is noted that instant formulas (1), (14), and (18) in claim 8 comprise fused rings as substituent groups on the phenyl groups of general formulas I or II.] Hosokawa et al. clearly discloses the formulas may be used as light emitting material for organic electroluminescence devices with regard to claim 2 (see EP ref. Par. 33). It is preferred that the light emitting layer comprise 0.1-20% by weight of the formula 1 compounds with regard to claim 4 (see EP ref. paragraph 36). Hosokawa et al. further discloses an EL device with an aromatic tertiary amine or phthalocyanine derivative between the light emitting layer and the anode with regard to claims 5 and 6 (see EP ref. Par. 39). With regard to claim 7, Hosokawa et al. discloses the formation of blue light emitting devices (see examples and Tables). Hosokawa et al. does not exemplify compounds according to the instant claims; however, it would have been obvious to one of ordinary skill in the art at the time of the invention to have formed the compounds and to have used them in a light emitting device as claimed, because Hosokawa et al. teach all the required elements of claims 1-8. With regard to the capability to emit blue light, Hosokawa et al. is considered to teach compounds within those defined by applicant and these compounds would be expected to have the same or similar light emitting properties. Recitation of a newly disclosed property does not distinguish over a reference disclosure of the article or composition claims. *General Electric v. Jewe Incandescent*

*Lamp Co.*, 67 USPQ 155. *Titanium Metal Corp. v. Banner*, 227 USPQ 773. Applicant bears responsibility for proving that reference composition does not possess the characteristics recited in the claims. *In re Fitzgerald*, 205 USPQ 597, *In re Best*, 195 USPQ 430.

5. The rejection of claims 1-7 are rejected under 35 U.S.C. 102(b) as anticipated by Onikubo et al. (US 6,280,859) is withdrawn.

6. Claims 1-7 are rejected under 35 U.S.C. 103(a) as obvious over Onikubo et al. (US 6,280,859).

Onikubo et al. discloses electroluminescent elements comprising material according to formula [1]



Onikubo et al. discloses A is a fused aromatic group (which would include the 4 member ring groups of claim 1) and Ar may be a substituted aromatic group (the substitution group reads upon instant "A" groups or alternatively, X of the above formula [1] may be an alicyclic residue) (see col. 2, lines 15-58).

Onikubo et al. clearly discloses the formulas may be used as light emitting material for organic electroluminescence devices with regard to claim 2 (see EP ref. Par. 33). It is

preferred that the light emitting layer comprise 0.1-20% by weight of the formula 1 compounds with regard to claim 4 (see col. 4, lines 37-44)). Onikubo et al. further discloses an EL device with an aromatic tertiary amine or phthalocyanine derivative between the light emitting layer and the anode with regard to claims 5 and 6 (see col. 180, lines 24-58)). With regard to claim 7, Onikubo et al. discloses the formation of blue light emitting devices (see examples). Onikubo et al. does not exemplify compounds according to the instant claims; however, it would have been obvious to one of ordinary skill in the art at the time of the invention to have formed the compounds and to have used them in a light emitting device as claimed, because Onikubo et al. teach all the required elements of claims 1-7. With regard to the capability to emit blue light, Onikubo et al. is considered to teach compounds within those defined by applicant and these compounds would be expected to have the same or similar light emitting properties. Recitation of a newly disclosed property does not distinguish over a reference disclosure of the article or composition claims. *General Electric v. Jewe Incandescent Lamp Co.*, 67 USPQ 155. *Titanium Metal Corp. v. Banner*, 227 USPQ 773. Applicant bears responsibility for proving that reference composition does not possess the characteristics recited in the claims. *In re Fitzgerald*, 205 USPQ 597, *In re Best*, 195 USPQ 430.

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims

are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. The rejection of claims 1 and 2 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,743,948 is withdrawn.

9. The rejection of claims 3-7 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 6,743,948 in view of US 6,951,693 is withdrawn.

10. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 and 12-23 of copending Application No. 11/282,697. Although the conflicting claims are not identical, they are not patentably distinct from each other because the formula 1 compound of '697 claim 1 encompasses formula (I) of the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. (It is noted that a notice of allowability has been mailed in the '697 application, but the patent has not yet been issued).

11. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8-18 of copending Application No. 11/711,655. Although the conflicting claims are not identical, they are not patentably distinct from each other because the formula IV compound of '655 claim 8 encompasses formula (II) of the instant claims. Especially note compound (26) in '655 claim 18.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### ***Response to Arguments***

12. Applicant's arguments filed October 10, 2007 have been fully considered but they are not persuasive.

With regard to the anticipation rejection over Hosokawa et al., the 35 U.S.C. 102 rejections have been withdrawn. With respect to the grounds of an obviousness rejection over Hosokawa et al., applicant argues Hosokawa does not indicate blue light is emitted. With regard to the capability to emit blue light, Hosokawa et al. is considered to teach compounds within those defined by applicant and these compounds would be expected to have the same or similar light emitting properties. Recitation of a newly disclosed property does not distinguish over a reference disclosure of the article or composition claims. *General Electric v. Jewe Incandescent Lamp Co.*, 67 USPQ 155.

*Titanium Metal Corp. v. Banner*, 227 USPQ 773. Applicant bears responsibility for proving that reference composition does not possess the characteristics recited in the claims. *In re Fitzgerald*, 205 USPQ 597, *In re Best*, 195 USPQ 430. It is further noted that one of ordinary skill in the art would immediately envisage formation of the instant compounds, since all of the required components are recited with sufficient specificity by Hosokawa et al.

With regard to the anticipation rejection over Onikubo et al., the 35 U.S.C. 102 rejection has been withdrawn. With respect to the obviousness rejection over Onikubo et al., applicant argues the claimed species does not read on any exemplified compounds. The examiner notes that non-preferred embodiments can be indicative of obviousness (see *In re Lamberti*, 192 USPQ 278 (CCPA 1976); *In re Boe*, 148 USPQ 507 (CCPA 1976); *In re Kohler*, 177 USPQ 399 (CCPA 1973)), and a reference is not limited to working examples (see *In re Fracalossi*, 215 USPQ 569 (CCPA 1982)).

Applicant argues Onikubo et al. does not indicate blue light is emitted. With regard to the capability to emit blue light, Onikubo et al. is considered to teach compounds within those defined by applicant and these compounds would be expected to have the same or similar light emitting properties. The examiner does not consider the teaching by Onikubo et al. that further dopants can *improve* blue light emission to be a suggestion that the amino compounds themselves can not emit blue light. Recitation of a newly disclosed property does not distinguish over a reference disclosure of the article or composition claims. *General Electric v. Jewe Incandescent Lamp Co.*, 67 USPQ 155. *Titanium Metal Corp. v. Banner*, 227 USPQ 773. Applicant bears

responsibility for proving that reference composition does not possess the characteristics recited in the claims. *In re Fitzgerald*, 205 USPQ 597, *In re Best*, 195 USPQ 430. It is further noted that one of ordinary skill in the art would immediately envisage formation of the instant compounds, since all of the required components are recited with sufficient specificity by Onikubo et al.

The following it further noted:

Where a claimed improvement on a device or apparatus is no more than "the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement," the claim is unpatentable under 35 U.S.C. 103(a). *Ex Parte Smith*, 83 USPQ.2d 1509, 1518-19 (BPAI, 2007) (citing *KSR v. Teleflex*, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007)). Accordingly, applicant claims a combination that only unites old elements with no change in the respective functions of those old elements, and the combination of those elements yields predictable results; absent evidence that the modifications necessary to effect the combination of elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a). *Ex Parte Smith*, 83 USPQ.2d at 1518-19 (BPAI, 2007) (citing *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396. Accordingly, since applicant has submitted no persuasive evidence that the combination of the above elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a) because it is no more than the predictable use of prior art elements according to their established functions

resulting in the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement.

***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Dawn Garrett/

Dawn Garrett  
Primary Examiner  
Art Unit 1794